

**LOUISIANA DEPARTMENT OF
TRANSPORTATION AND DEVELOPMENT
TRAFFIC CONTROL SIGNS SPECIFICATION**
Revised September 21, 2016

I. INTRODUCTION

This specification sets forth the material and production requirements for traffic control signs.

II. SIGN BLANKS

The aluminum blanks shall be .080 inch thickness complying with ASTM B209, Alloy 6061-T6 or Alloy 5052-H38. Blanks shall be cut and punched in accordance with the charts provided on **Attachment "A"**. Dimensions may be +/- 1/16" from those shown on **Attachment "A"**. The aluminum blanks shall have a chromate conversion coating meeting ASTM B449 or ASTM B921 Class I or II. After fabrication the blank shall have a flatness equal to or less than 0.031 inch per foot of length and 0.004 inch per inch of width. All burrs shall be removed from the edges and the aluminum blanks shall be free from grease, dirt or loose phosphate coating

III. SHEETING, PAINT AND ENAMELS

The reflective sheeting for lines 1-170 and 175-290 shall be Type-X and be an approved product on the Approved Materials List (AML), Reflective Sheeting Type X Permanent (attached). The reflective florescent orange sheeting for lines 171-174 shall be an approved product on the AML for ReflectSheet, T X, TempSign, Barr, ChanDev (attached). All non-reflective sign sheeting materials, process paints and enamels shall conform to the sheeting manufactures requirements.

IV. SIGN IDENTIFICATION MARKINGS

Front or Sign Faces: All sign faces, except object markers, shall be marked on the lower right corner of the sign face, as shown on **Attachment "B"**. This information shall include the following three (3) items:

1. MUTCD Code
2. Vendor Logo, Name, or Initials
3. Year of manufacture.

Markings shall be screened on the face as indicated with the appropriate inks.

Back of Sign: On the back of each sign, including object markers, shall be the Product ID, MUTCD code, and the year of manufacture as shown on **Attachment "C"**. This information shall include the following three (3) items:

1. Product ID
2. MUTCD Code
3. Year of Manufacture

Each sign's Product ID may be found on the attached bid document. Markings must be on either a decal or hand written using weather resistant materials.

V. SHIPMENT

Upon shipment, the pallet shall not exceed 2,000 pounds. Each pallet shall be cardboard covered and securely banded for shipment. The cardboard covering each pallet should be marked with purchase order number, sign code, size and quantity. Signs shall be packaged in bundles. Each bundle shall consist of two (2) of the same signs, face to face. Each bundle may have additional packaging requirements per the sheeting manufacture. Each bundle shall be double taped on the center of two opposite sides with 3M Tape #893 or equivalent. Each bundle does not have to be covered in cardboard. Each shipment shall be accompanied by a freight bill and packing list denoting quantity shipped and DOTD purchase order number. All signs must be delivered on a flatbed trailer and must be covered with a tarp. Failure to adhere to shipping directives will result in rejection of materials and shipment will be returned "FREIGHT COLLECT" to vendor.

Minimum order shall be 1,000 pounds.

VI. SHEETING WARRANTY

The vendor shall guarantee all sheeting and process colors supplied under these specifications for the satisfactory performance life specified under this section. Such warranty shall cover cost of material, process colors and all associated replacement cost occasioned thereby.

Reflective Sheeting Performance Standards

Type	Retroreflectivity ¹ - Durability ²				Colorfastness ³
	Orange/ Fluorescent Orange		All Colors, Except Orange/Fluorescent Orange		
III	3 Years	80 ⁴	10 Years	80 ⁴	3 Years
DOTD X	3 Years	80 ⁵	7 Years	80 ⁵	3 Years

Manufacture's Guaranty-Reflective Sheeting

¹ Percent retained retroreflectivity of referenced table after installation and the field exposure time specified.

² All sheeting shall maintain its structural integrity, adhesion and functionality after installation and the field exposure time specified.

³ All colors shall conform to the color specification limits of ASTM D 4956 after installation and the field exposure time specified.

⁴ ASTM D 4956, Table 4.

⁵ Louisiana Standard for Roads and Bridges 2006, Section 1015-1A

Type	<p>Manufacture shall restore the sign face in its field location to its original effectiveness at no cost to the Department if failure occurs during the time period ¹ as specified below</p>		<p>Manufacture shall replace the sheeting required to restore the sign face to its original effectiveness at no cost to the Department if failure occurs during the time period ¹ as specified below</p>
	<p>Orange/Fluorescent Orange</p>	<p>All colors, except Orange/Fluorescent Orange</p>	<p>All Colors, Except Orange/Fluorescent Orange</p>
III	< 3 Years	< 7 Years	7-10 Years
DOTD X	3 Years	80	5-7 Years

¹ From the Date of sign installation